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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09 757,378	01 09 2001	James Brady	98-C-037C1	6527

7590

10 07 2002

Lisa K. Jorgenson
M/S 2346
1310 Electronics Dr.
Carrollton, TX 75006

EXAMINER

LEE, BENNY T

ART UNIT

PAPER NUMBER

2817

DATE MAILED: 10/07/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

751378

Applicant(s)

Brady et al

Examiner

B. Lee

Group Art/Unit

2817

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE Three (3) MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on 24 July 2002 under 37 CFR 1.116
- ☒ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1, 3-6, 8-10, 11, 13, 14, 16-19 is/are pending in the application.
- ☐ Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1, 3-6, 8-10, 11, 13, 14, 16, 17-19 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☒ The proposed drawing correction, filed on 24 July 2002 is ☒ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) _____.
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 11
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

Office Action Summary

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The finality of the Office action of 4 June 2002 has been withdrawn, the after final amendment of 24 July 2002 has been entered and a new grounds of rejection follows:

The following claim has been found objectionable for reasons set forth below:

In claim 1, lines 8, 14; claim 5, line 3; claim 11, lines 8, 12, note that --to-- should follow "parallel" at each occurrence.

In claim 11, lines 7, 11, note that "a second area" should correctly be --the second area-- for proper antecedent basis.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 3, 4, 8, 9, 11, 13, 14, 17, 18 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by either the EP ('600) reference or the Japanese patent Abstract ('870), both cited by applicants'.

Note that Fig. 10 of the EP reference discloses a main transmission line conductor (TL) and auxiliary conductors disposed parallel to and on opposite sides of the main conductor (TL) in a planar arrangement. As is evident from fig. 9 the main conductor (TL) is connected at one end thereof to a source or driver (IT) and connected at a second opposite end to an internal or load circuit (10). Moreover, as is evident from fig. 9, the auxiliary circuits (AI) of which only one is depicted in Fig. 9, has a first end thereof connected in a first area adjacent the source or driver while the second opposite end of the auxiliary conductor is left unconnected in a second area which is adjacent the internal circuit (10). In operation, it should be noted that the effect of the auxiliary

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conductors is to reduce stray capacitance between the main and auxiliary conductors, thereby reducing the propagation delay and thus increasing the speed of clock pulses on the main transmission line.

The Japanese Patent Abstract also discloses a main signal line (1) connected between a first or driver terminal (7) and a second opposite load terminal (8), where the first terminal includes a driver or source (4) attached to the main signal line. Note that sub-signal lines (2, 3) are disposed parallel to the main signal line (1) at opposite sides thereto. Moreover, note that first ends of the sub-signal lines (2, 3) are connected to the first terminal (7) in an area adjacent thereto. Furthermore, note that second opposite ends of the sub-signal lines are left unconnected adjacent the second terminal (8). In operation, note that the sub-signal lines (2, 3) provide for stray capacitances (9, 10) relative to the main line and whose capacitance value can be used to increase the propagation speed of signals in the main signal line and thus reduces propagation delays therein. Furthermore, note that the main signal line and the sub-signal lines are arranged in a planar arrangement.

Claims 5, 6 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by the EP ('600) reference, cited by applicants'.

Note in Fig. 10 that an additional auxiliary conductor (U.A.L.) is disposed with respect to the main transmission line conductor (TL) in a parallel arrangement which constitutes a second plane. Moreover, note that the further auxiliary conductor (U.A.L.) has a first end thereof

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connected to the main transmission line conductor in an area adjacent the source, while a second end thereof is left unconnected, as is exemplarily depicted in fig. 9 thereof.

Claims 10; 16; 19 are rejected under 35 U.S.C. 103 as being unpatentable over either the EP ('600) reference or the Japanese Patent Abstract ('870), both cited by applicants'.

Although the dimensions of the metal conductors constituting the main transmission line/signal conductor and the sub-signal/auxiliary line conductor are unspecified, the selection of such dimension (i.e. to be about 1000 micron) would have been considered to have been a design optimization, whose value would have been within the purview of one of ordinary skill in the art, based on desired operating conditions, thereby suggesting the obviousness of such an optimization.

Applicant's submission of an information disclosure statement under 37 CFR 1.97© with the fee set forth in 37 CFR 1.17(p) on 24 July 2002 prompted the new ground(s) of rejection presented in this Office action. Accordingly **THIS ACTION IS MADE FINAL**. See MPEP § 609(B)(2)(I). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and an extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire less than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to Benny Lee at telephone number 308 4902.

Benny Lee

BENNY LEE
REGISTERED PATENT ATTORNEY
WASHINGTON, D.C.